

Prevalence of malnutrition and poor food intake and their association with health-related outcomes in older adults in Indian hospitals

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The association between nutritional issues and health-related outcomes of older adults in India: A prospective observational nutritionDay study

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Key NCP Components

SCREENING & ASSESSMENT
NUTRITION SUPPORT INTERVENTION

IS INDIA THE SAME?



Photo by Pranav Kumar Jain



“ Direct determinants
exacerbating malnutrition in
older adults in India include:
Poor food intake &
Food insecurity

STUDIES IN INDIA OUGHT TO LINK THE
INTRICACIES OF FOOD SECURITY

Complex Cycle

INVOLVING MALNUTRITION, POOR FOOD INTAKE, HOSPITALISATION AND
FOOD INSECURITY IN INDIA



POOR FOOD
INTAKE

HP IN INDIA
LACK
CONFIDENCE

OUT-OF-
POCKET
EXPENDITURE

LOW FOOD
SECURITY

nutritionDay

ANNUAL ONE DAY CROSS-SECTIONAL AUDIT
PROSPECTIVE OBSERVATIONAL STUDY
262 OLDER ADULTS

MEAN AGE 69 +/- 8 YEARS
91% 60-79 YEARS
65% MALE
85% COMORBIDITIES
40% CIRCULATORY
52% OVERWEIGHT/OBESE
70% ELECTIVE
2% TERMINALLY ILL



Malnutrition Risk

MAPPED NUTRITION DAY
QUESTIONS TO THE MST

Food Intake

ONE MAIN MEAL ON A SINGLE DAY,
USING A VISUAL PLATE SCALE



Nutritional Issues



NOT AT MALNUTRITION RISK

<50% MEAL INTAKE

100% MEAL INTAKE

AT MALNUTRITION RISK

<50% MEAL INTAKE

100% MEAL INTAKE

Malnutrition Risk

PREVALENCE OF MALNUTRITION RISK WAS FOUND TO BE
44% (n=109).

ONE-IN-THREE PARTICIPANTS
were at malnutrition risk on admission (n=34, 31%)



MALNUTRITION EXISTS AND DEVELOPS
PRIOR TO EPISODES OF HOSPITALISATION

Malnutrition Risk

TWO-IN-THREE

AT RISK PATIENTS RECEIVED A
REGULAR DIET **WITHOUT** NUTRITION SUPPORT

At malnutrition risk $\leq 50\%$ intake $n=13(59\%)$

At risk malnutrition risk 100% intake $n=37(65\%)$



HIGHLIGHTING A POTENTIAL FRACTURE IN
THE NUTRITION CARE PROCESS IN INDIA

Malnutrition Risk

WAS PRESENT ACROSS
ALL BMI CLASSIFICATIONS



SCREENING AND ASSESSMENT
WITH VALIDATED TOOLS
INCLUDE BOTH PHENOTYPIC
AND AETIOLOGIC CRITERIA



Poor Food Intake

ONE-IN-FOUR

PARTICIPANTS REPORTED $\leq 50\%$ MEAL INTAKE (N=68, 28%)



FOOD INSECURITY IS ASSOCIATED WITH INCREASED
LIKELIHOOD OF EATING LARGER AMOUNTS OF FOOD WHEN
AVAILABLE

Nutritional Issues & Health-Related Outcomes

NO ASSOCIATION
BETWEEN NUTRITIONAL ISSUES AND
30-DAY LENGTH OF STAY, READMISSION, IN-HOSPITAL MORTALITY

Length of Stay

MEDIAN LOS WAS
EIGHT DAYS (1-92)



APPROPRIATE DISCHARGE PLANNING
AND CONTINUITY OF CARE IS KEY TO CONNECT
AT RISK OR MALNOURISHED PATIENTS WITH
APPROPRIATE RESOURCES IN THE COMMUNITY



First Study



STARTING POINT



Future Research

1. BARRIERS TO IMPLEMENTING EVIDENCE-BASED GUIDELINES
2. NUTRITION SUPPORT PRE- AND POST-HOSPITAL ADMISSION
3. FOOD SECURITY AS A BARRIER TO FOOD FIRST STRATEGIES OR THE ABILITY TO PURCHASE FOODS
4. TRANSLATION OF EVIDENCE TO PRACTICE

Questions



Photo by Davide Ragusa

Thank you

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Broader Literature

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